

SAVINGS IN THE HOUSE

QUICK TIPS TO CUT YOUR UTILITY BILL

Workshop Information

- **Introduce energy efficiency and weatherization**
- **Discuss no-cost ways YOU can impact your home's energy use now**
- **Look at “invisible” areas of your home that may need work**
- **Introduce advanced meters**
- **Introduce steps toward solar energy**



Workshop Goals

- Understand how your home uses energy
- Learn easy steps to reduce your utility bill
- Find out how to make your home more comfortable
- Decide what you want to do next...

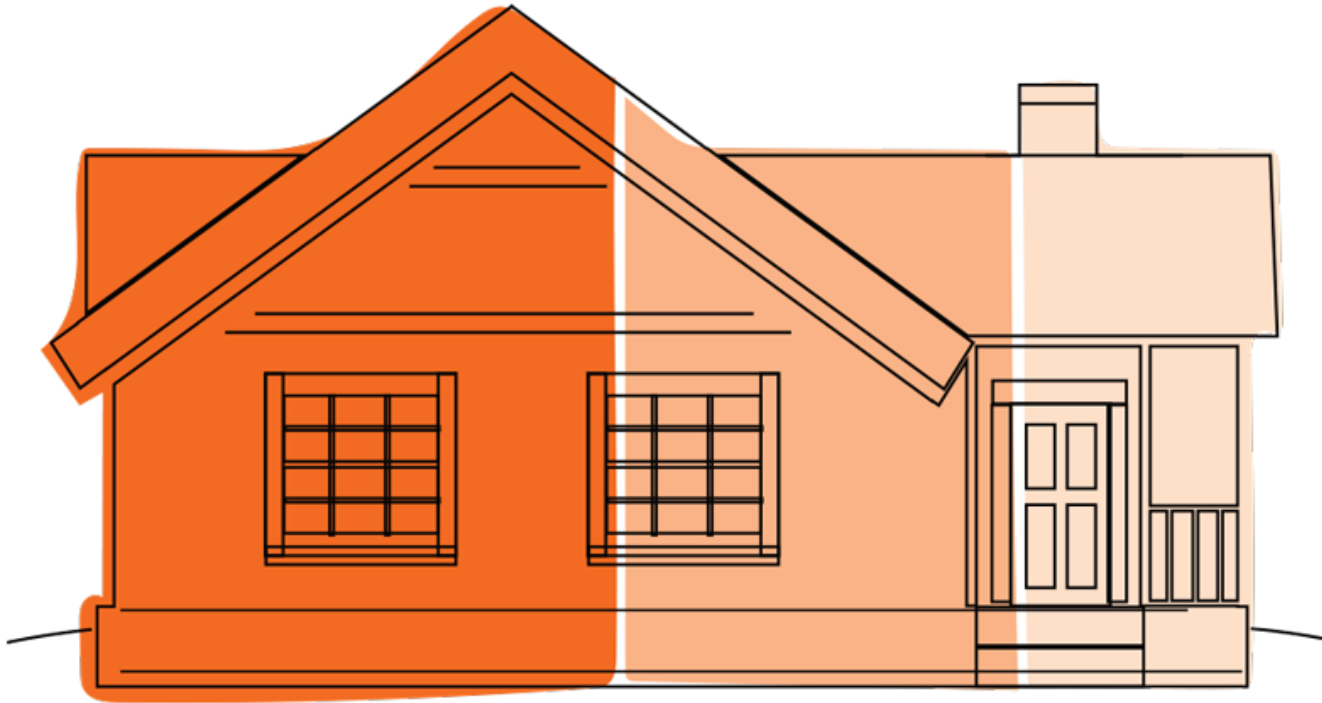


Two key terms

- **Energy efficiency:** Reducing the amount of energy used while maintaining comfort.
- **Weatherization:** Protecting your home from the elements (weather) and reducing energy consumption.

Both help save you money and protect the environment!

Here's what uses the most energy in your home.

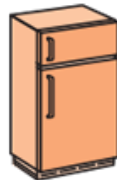


Nearly half your money spent on electricity goes to heating and cooling.



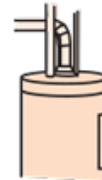
44%

Heating and air conditioning



38%

Appliances, electronics and lighting



18%

Water heating



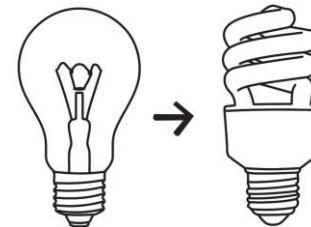
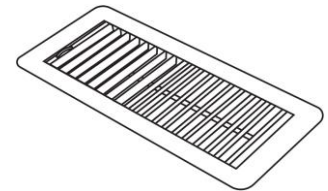
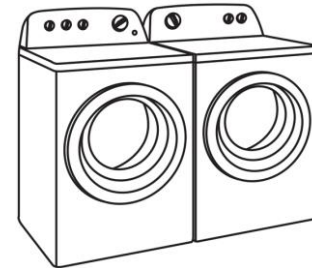
CITY OF KNOXVILLE

Energy Efficiency

No-cost Actions to Cut Your Bill

Energy Efficiency: Quick Fixes

- Turn things off
 - Power strips can help
- Adjust your thermostat
 - Just one degree makes a difference!
- Wash clothes in cold water
- Check your air vents
- Swap your lighting
 - Use CFLs or LEDs



Weatherization

Low-cost Home Improvements

**On average,
an un-weatherized
home in the U.S.
leaks air at a rate
equivalent to a
four-foot-square
hole in the wall**



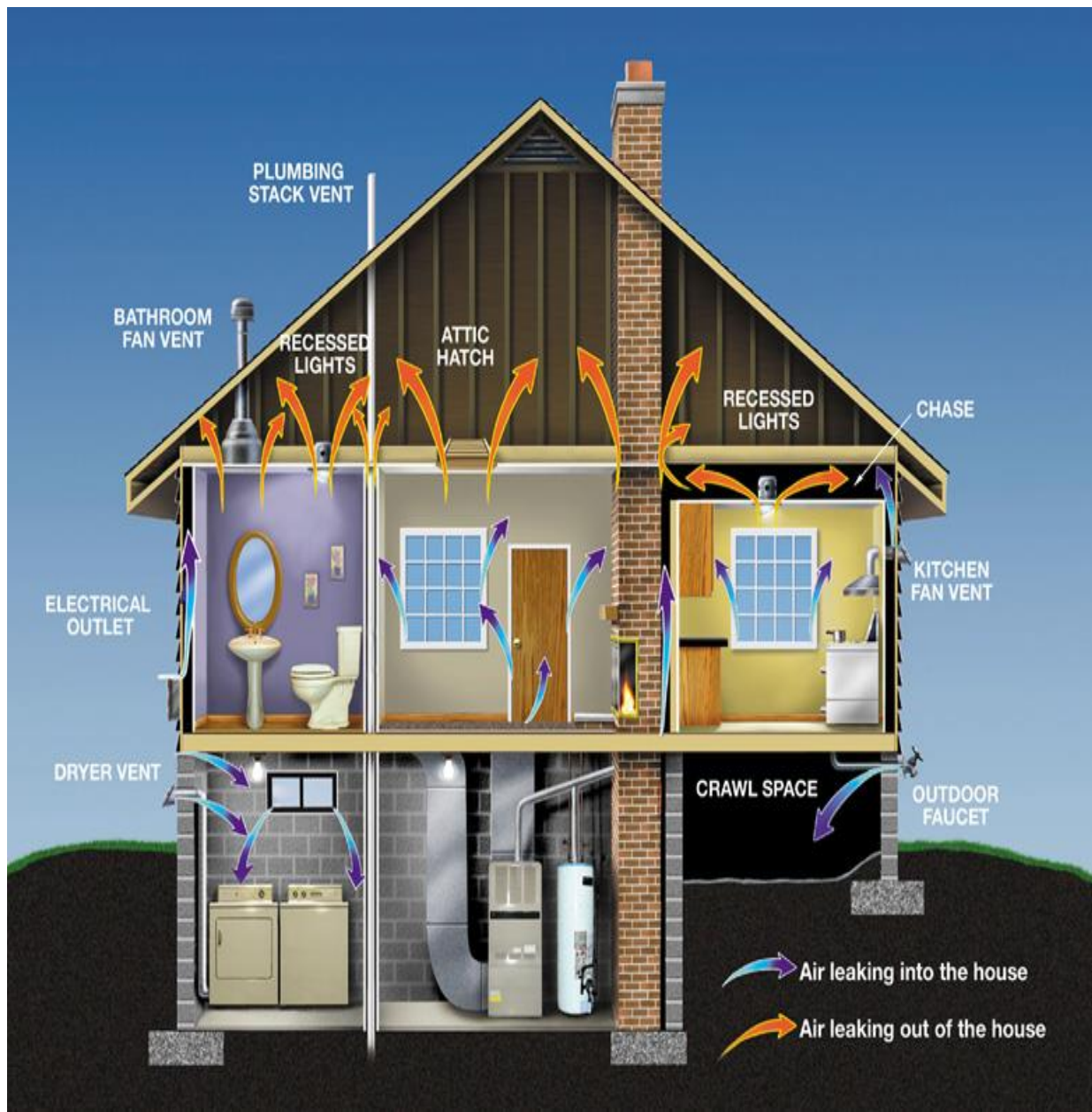
Why care? Because drafts...

- ...are uncomfortable
- ...bring in outside dust
- ...cause poor air quality
- ...let in outside noise
- ...cost a lot of money

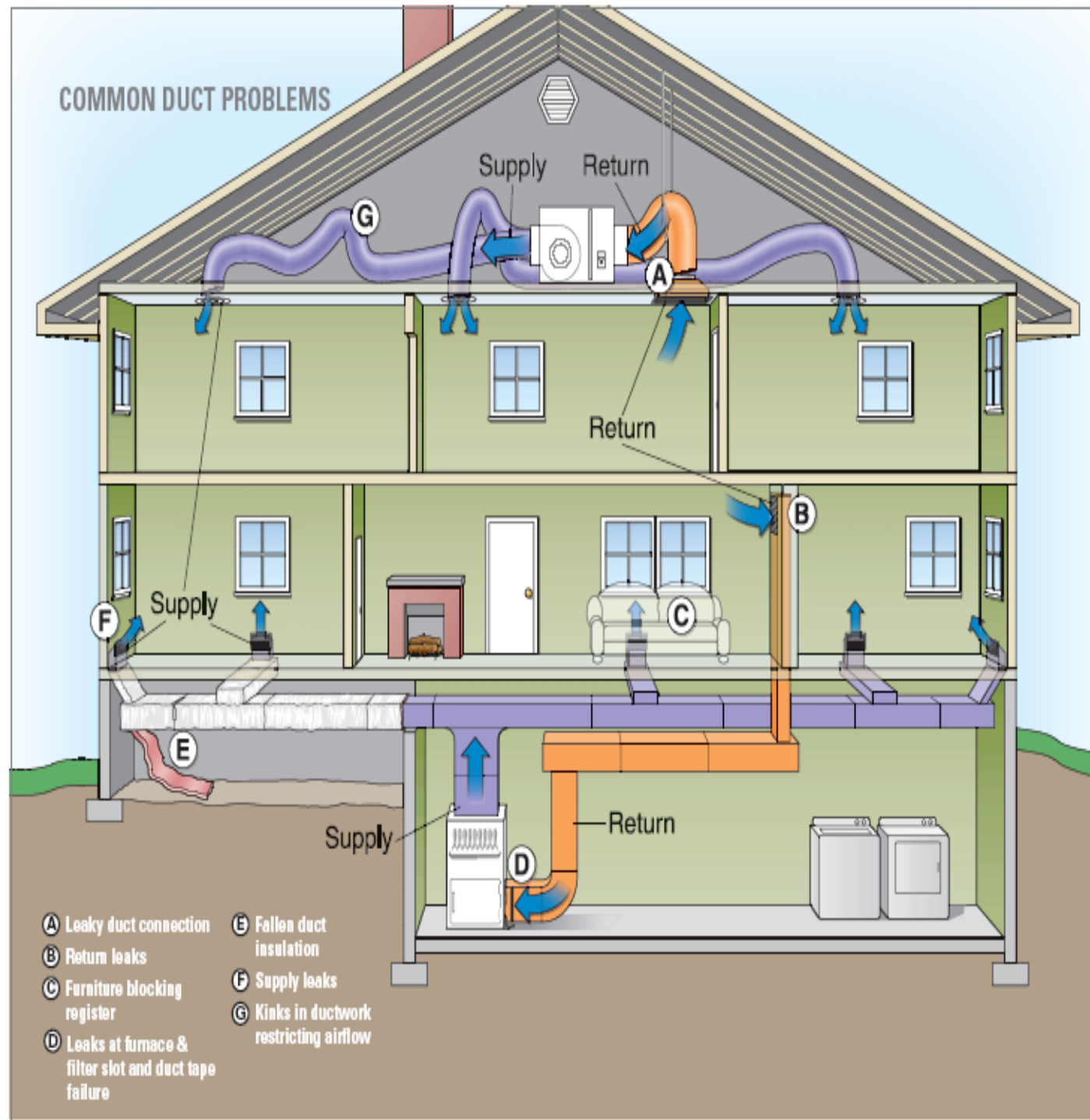


How does this happen?

Air Leaks



Duct Leaks



Poor Insulation



Weatherization: Quick Fixes

- Close doors & windows
- Seal air leaks around doors and windows
 - Caulk small gaps
 - Install weather stripping on larger gaps (or roll up a towel!)
- Replace air filters regularly



Next Steps

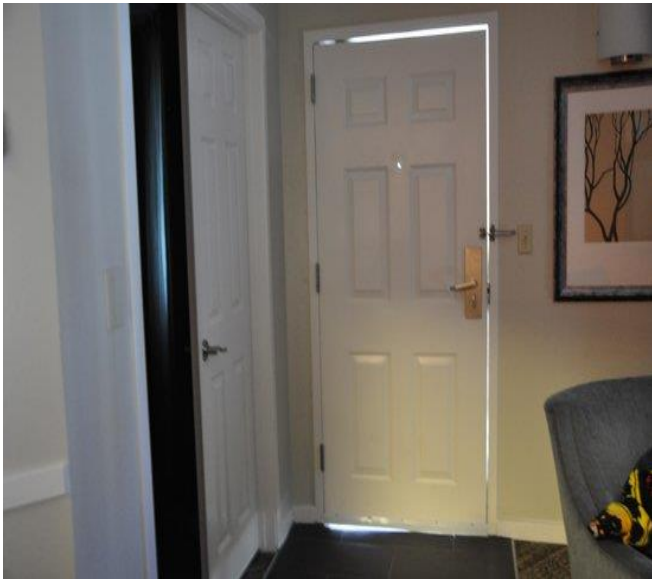
Take Your Savings to the Max

Every home is unique



Every home has unique problems

Some problems
you can see.



Every home has unique problems

Some problems
you can't see.



Every home will need a different type of retrofit

Common Energy Upgrades

- Air sealing to stop leaks
- Sealing and insulating ductwork
- Increasing insulation
- Replacing old, inefficient heaters, air conditioners, and refrigerators
- Replacing broken or missing doors and windows

What's the right next step for you?

- **Create new energy-efficient habits**
 - This is your home. The more you do, the more you save.
 - Visit www.savingsinthehouse.com for tips
- **Apply for a Retrofit**
 - Must be income-eligible
 - Call the CAC at 865-244-3080 for more info
- **Sign up for a TVA eScore**
 - eScore Advisors will recommend improvements specific to your home



Advanced Meters
*Use New KUB Meters to Control
Your Bill*

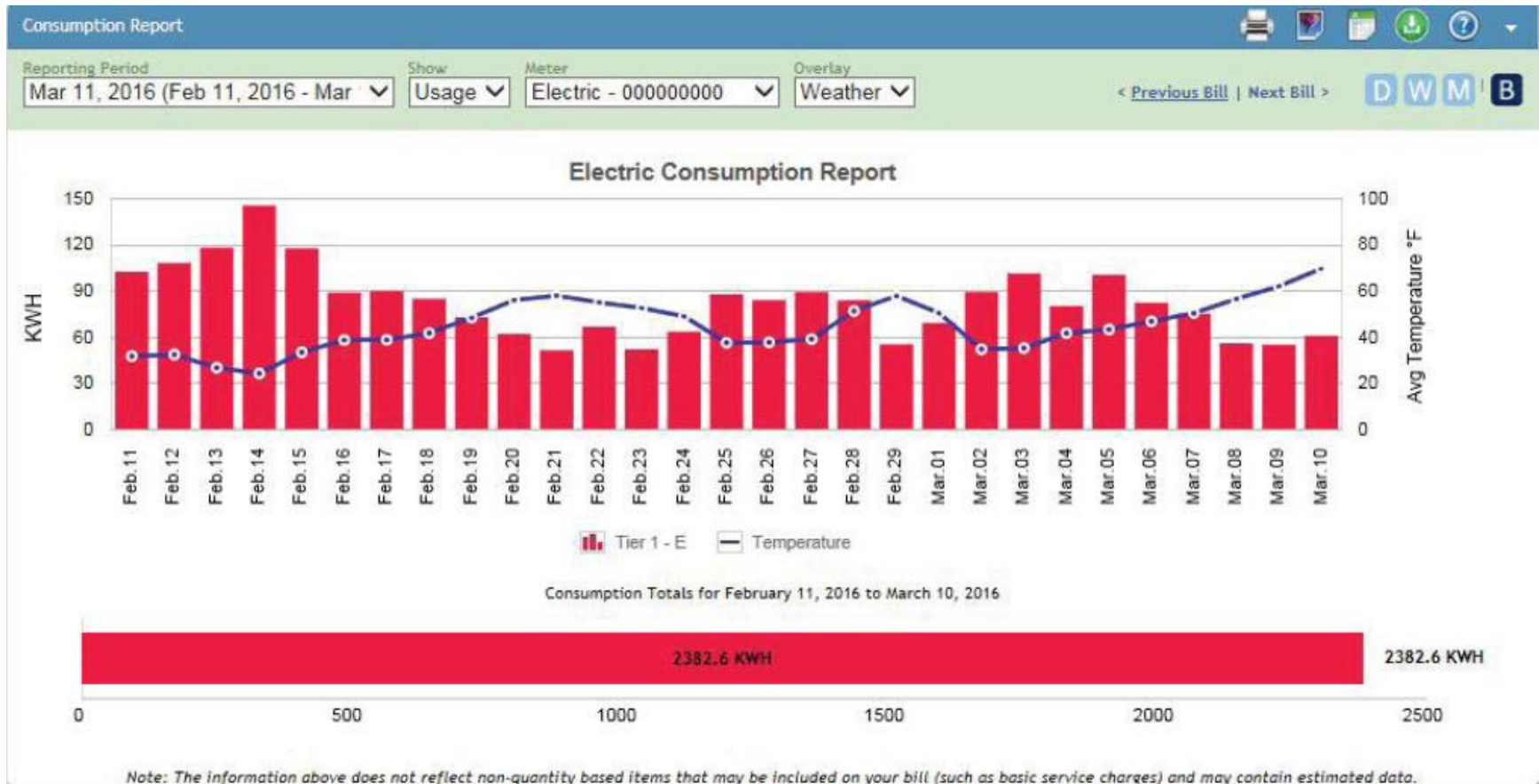
Advanced (“Smart”) Meters:

- KUB is installing new advanced meters system-wide
- Two-way communication between KUB and the meter allows:
 - Remote meter reading
 - Outage detection
 - Remote start/stop



KUB's New Customer Portal

Track your usage in real-time



Solar Energy

Basic Info for Homes Ready for Solar

Solar is Growing in Knoxville!

- 6 solar arrays on City of Knoxville property
- 14 solar arrays on Knox County property
- 30 kW capacity in 2008 → 5.5+ MW capacity today!



Tips for Going Solar

1. Invest in energy efficiency first!
2. Review your solar potential & options

Visit <http://pvwatts.nrel.gov> to sketch a system for your property

3. Find a NABCEP Certified Installer

Solar professionals can design your system and navigate utility connections and any incentives

System Capacity: 2.9 kWdc (20 m²)



RESULTS

Print Results

3,818 kWh per Year *

System output may range from 3,750 to 4,044 kWh per year near this location.
Click [HERE](#) for more information.

Month	Solar Radiation (kWh / m ² / day)	AC Energy (kWh)	Energy Value (\$)
January	2.86	219	22
February	3.65	247	25
March	4.70	340	34
April	5.47	374	37
May	5.66	390	39
June	6.06	395	39
July	5.98	402	40
August	5.52	371	37
September	4.89	323	32
October	4.54	321	32
November	3.25	226	22
December	2.82	210	21
Annual	4.62	3,818	\$ 380

Not Ready for Solar?

- Invest in energy efficiency to lower your bills.
- Support green energy through TVA's Green Power Switch!

Small Price, Big Benefit

One year by the numbers*



Each year for
\$8 per month
(or 2 blocks per month)



You are contributing to
3,600 kWh
of renewable energy

THAT'S THE SAME AS



Not using
246 gallons
of gasoline



Not driving
5,199 miles



Planting nearly
2 acres
of forest each year



<https://www.tva.gov/Energy/Renewable-Energy-Solutions/Green-Power-Switch>

